

1 WHAT IS CLAIMED IS:

- 2 1. A furnace residue washing method comprising the steps of:
 - 3 collecting residue from a furnace;
 - 4 cooling the residue by water and screening the residue by different dimension
 - 5 sieves;
 - 6 separating the screened residue into different iron contents by magnetism;
 - 7 separating and depositing sand from the water;
 - 8 crushing the screened residue of large dimension scale;
 - 9 separating the screened residue of large dimension scale by different iron
 - 10 contents by magnetism; and
 - 11 recollecting separately the separated and screened residue of large dimension
 - 12 scale.
- 13 2. The method as claimed in claim 1, wherein a sprinkling system is provided in
- 14 the screening step to provide water to cool the residue from the furnace.
- 15 3. The method as claimed in claim 1, wherein the residue is screened into
- 16 separated groups to respectively have dimensions of above 30mm, between 12-30mm,
- 17 between 8-12mm and below 8mm.
- 18 4. The method as claimed in claim 2, wherein the residue is screened into
- 19 separated groups to respectively have dimensions of above 30mm, between 12-30mm,
- 20 between 8-12mm and below 8mm.
- 21 5. The method as claimed in claim 1, wherein after the water is supplied, lime
- 22 powder is washed from the residue and mixed with the water.
- 23 6. The method as claimed in claim 4, wherein after the water is supplied, lime
- 24 powder is washed from the residue and mixed with the water.

1 7. The method as claimed in claim 6, wherein the water is recycled in a water
2 tank.

3 8. The method as claimed in claim 1, wherein a grinding device is provided to
4 refine the recollected residue.

5 9. The method as claimed in claim 2, wherein a grinding device is provided to
6 refine the recollected residue.

7 10. The method as claimed in claim 3, wherein a grinding device is provided to
8 refine the recollected residue.

9 11. The method as claimed in claim 4, wherein a grinding device is provided to
10 refine the recollected residue.

11 12. The method as claimed in claim 5, wherein a grinding device is provided to
12 refine the recollected residue.

13 13. The method as claimed in claim 6, wherein a grinding device is provided to
14 refine the recollected residue.

15 14. The method as claimed in claim 7, wherein a grinding device is provided to
16 refine the recollected residue.